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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/581,343	06/02/2006	Hirofuma Fujimaru	0075868-000097	5041

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BUCHANAN, INGERSOLL & ROONEY PC  
POST OFFICE BOX 1404  
ALEXANDRIA, VA 22313-1404

EXAMINER
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SASTRI, SATYA B

ART UNIT	PAPER NUMBER
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1796

NOTIFICATION DATE	DELIVERY MODE
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11/16/2009

ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

ADIPFDD@bipc.com

<b>Office Action Summary</b>	<b>Application No.</b> 10/581,343	<b>Applicant(s)</b> FUJIMARU ET AL.	
	<b>Examiner</b> SATYA B. SASTRI	<b>Art Unit</b> 1796	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 10 August 2009.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-7 and 9-22 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-7 and 9-13, 15-22 is/are rejected.
- 7) ☒ Claim(s) 14 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                     | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

### **DETAILED ACTION**

1. This office action is in response to amendment filed on 8/10/09. Claims 1-7, 9-22 are now pending in the application. Applicant's comments regarding the objection to drawings are found persuasive and the objection is withdrawn.

### ***Previously Cited Statutes***

2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

3. Claims 1-7, 9-13, 15-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hatsuda et al. (US 5,140,076) and as evidenced by <http://www.wovenwire.com/reference/particle-size.htm>.

The discussions with regard to Hatsuda et al. and the evidence reference as set forth in paragraph 7 of the office action dated 3/11/08 is incorporated herein by reference.

Furthermore, Hatusda et al. disclose that the powdery alkali metal acrylate absorbent polymer is obtained by copolymerizing 100 parts by weight of an acrylic acid salt monomer comprising 1 to 50 mol% of acrylic acid and 99 to 50 mol% of an alkali metal acrylate and 0 to 5 parts by wt. of a crosslinking monomer in an aqueous solution (col. 3, 8-37).

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The prior art fails to disclose a composition comprising carboxylic group-containing water-insoluble absorbent resin containing monovalent cations and a polyvalent metal compound as claimed presently.

The prior art discloses a small genus of alkali metal acrylate absorbent resin that includes crosslinked carboxyl group-containing resins that may be surface treated with polyvalent metal compounds. Additionally, the disclosed monovalent counterion content of the alkali metal acrylate absorbent resin, i.e. 99 to 50 mol%, overlaps with the presently recited range for the counterion. In the case where the claimed ranges "overlap or lie inside ranges disclosed by the prior art" a *prima facie* case of obviousness exists. *In re Wertheim*, 541 F.2d 257, 191 USPQ 90 (CCPA 1976). See MPEP § 2144.05. In view of the general disclosure and in view of the case law, it would have been obvious to one of ordinary skill in the art to utilize polyvalent metal compounds to surface treat carboxyl group-containing water insoluble resins having monovalent counter ion within the disclosed range, including those that fall within the scope of present invention and thereby arrive at the presently cited claims, absent evidence of unexpected results reasonably commensurate in scope with the claim language.

The amount of monovalent cation associated with the water absorbent resin will control the extent to which resin absorbs pure water or will affect the ability of the resin to absorb salt water and as such, is a result effective variable. See MPEP § 2144.05 (B). Case law holds that "discovery of an optimum value of a result effective variable in a known process is ordinarily within the skill of the art." See *In re Boesch*, 617 F.2d 272, 205 USPQ 215 (CCPA 1980).

### ***Response to Arguments***

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4. In view of the amendment, rejection of claims 9 and 17 under 35 U.S.C. 112, second paragraph, as being indefinite and rejection of is withdrawn. Furthermore, in view of the amendment and arguments, rejection of claims 1-13, 15-17, 19, 20 under 35 U.S.C. 103(a) as obvious over Kimura et al. (US 5,026,800) is also withdrawn. Allowable subject matter indicated for claim 14 is maintained.

Applicant's arguments with regard to Hatsuda et al. are not found persuasive because the disclosure teaches a range of monovalent counter ion that overlaps with the presently recited range. While applicants contend that the working example discloses a range outside of the presently claimed range, applicant's attention is directed to col. 3, lines 30-37 which clearly discloses alkali metal acrylate range of 99 to 50 mol%. Disclosed examples and preferred embodiments do not constitute a teaching away from a broader disclosure or nonpreferred embodiments. *In re Susi*, 440 F.2d 442, 169 USPQ 423 (CCPA 1971). "A known or obvious composition does not become patentable simply because it has been described as somewhat inferior to some other product for the same use." *In re Gurley*, 27 F.3d 551, 554, 31 USPQ2d 1130, 1132 (Fed. Cir. 1994). All disclosures in reference patent must be evaluated, including nonpreferred embodiments; reference is not limited to disclosure of specific working examples. *In re Mills and Palmer*, 176 USPQ 196 (CCPA 1972).

Thus, the new grounds of rejection set forth above are necessitated by the amendment of the claims with new limitations from the specification and therefore, the action is properly made final.

***Conclusion***

5. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Satya Sastri at (571) 272 1112. The examiner can be reached on Mondays, Thursdays and Fridays, 7AM-5.30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. David Wu can be reached on 571-272-1114.

The fax phone number for the organization where this application or proceeding is assigned is (571) 273 8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Satya B Sastri/

Examiner, Art Unit 1796